

THE USE OF FLUORIDE VARNISH FOR CARIES PREVENTION IN PRESCHOOL CHILDREN IN PRIMARY CARE SETTINGS IN THAILAND

W Asawakun^a

Ratchaburi province, Thailand

SUMMARY: In Thailand, dental caries remains the most common chronic disease of childhood and leads to health, learning, and quality of life issues. From the Sixth National Oral Health Survey of Thailand, 90 % of preschool children (aged 3–5 yr) needed dental treatment by dental personnel. The aims of this study were to clarify the use of fluoride (F) varnish for caries prevention in the primary care setting, while minimizing the likelihood of enamel fluorosis, and to study the interactive effects between the psychological characteristics and family situations of mothers and the utilization of oral health services for preschool children. The study, with a correlational-comparative design, was conducted in 5 provinces: Chiangmai, Ratchaburi, Saraburi, Khon Kaen, and Songkhla. The sample studied consisted of 913 mothers of 3–5 yr-old children and 913 children. The oral health of the children was examined by dentists. Thirteen questionnaires, with the Likert summated rating method, were given to the mothers. The hypotheses were tested by statistical analyses of the data: three-way analysis of variance, stepwise multiple regression analysis, and path analysis. The results showed that the children who had better dental health had mothers who brought them regularly to the district health promotion hospital to receive F varnish applications. In group 1, consisting of 607 children who had received at least one F varnish treatment, 37.73% were caries-free while in group 2, consisting of 306 children who had never received a fluoride varnish treatment, only 26.80% were caries-free. After eliminating the confounding effect of the behaviour of the mothers in obtaining oral health services for their children, the mean dmft for 112 children in group 1 was 3.81 and while the mean dmft for 215 children in group 2 was 4.33. None of 913 children examined in the study had dental fluorosis.

Key words: Fluoride varnish; Fluorosis; Preschool children; Primary care setting; Thailand.

^aFor correspondence: Worrawan Asawakun, Regional Health Promotion 4, Department of Health, Ministry of Public Health, Ratchaburi province, Thailand, E-mail: asawakun@yahoo.com